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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/771,820

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John A. Higgins

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EXAMINER

TAKAOKA, DEAN O

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/771,820	Applicant(s) HIGGINS, JOHN A.	
	Examiner Dean O Takaoka	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,31,32 and 48-52 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,31,32 and 48 is/are rejected.
- 7) ☒ Claim(s) 49-52 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/23/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

Claim 31 is objected to because of the following informalities: The Examiner believes the word "if" (page 34, line 3) should be --of-- (e.g. "least part of said beam, the longitudinal axis of each [if] of said waveguides...").

Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 30 of U.S. Patent No. 6,762,661. Although the conflicting claims are not identical, they are not patentably distinct from each other because independent claims 1 and 30 of US '661 recite all limitations contained in independent claims 1 and 31 respectively in the current application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Stafford (U.S. Patent No. 5,504,575), Applicant's prior art submitted in the IDS dated July 23, 2004.

Claim 1:

Stafford (Figs. 1 – 5) shows a shutter switch for an electromagnetic wave beam (abstract, spec all where Stafford discloses parallel rays of radiation, radiation inherently electromagnetic, further where the preferred embodiment is used in a magnetooptic modulator – col. 1, line 61) comprising: a plurality of waveguides (92 – Fig. 3) adapted to receive at least part of an electromagnetic beam, the waveguides being adjacent to one another (adjacent optic fibers 92 shown in Fig. 3) with their longitudinal axes aligned with the propagation of the beam, the waveguides switchable to either transmit or block transmission of their respective portions of the beam (col. 4, lines 33 – 53 where switches 93, block radiation of the optical fiber 92 or are selectively opened to allow spectrum analysis).

Claim 31:

A millimeter beam transmission system (inherent in that a optical signal is transmitted, the optical signal inherently being defined as/in millimeter wavelengths) comprising; an electromagnetic beam transmitter (the electronic beam discussed in the

reasons for rejection of claim 1 above and the transmitter inherent as source for the transmitted waves thru slit 60 shown in Fig. 3, further exemplified as the source shown in Fig. 4 and 5); an electromagnetic beam receiver (detector 100 – Fig. 3); a shutter switch (shutter switch 93) positioned in the path of the beam between the transmitter and receiver, the shutter switch comprising at least one waveguide positioned to receive at least part of the beam, the longitudinal axis of each of the waveguides aligned with the propagation of the beam (the longitudinal axis of waveguides 92 shown aligned with the propagation of the beam – Fig. 3), each of the waveguide being switchable to either transmit or block transmission of its respective portion of the beam (the transmission or blocking of the electronic beam discussed in the reasons for rejection of claim 1 above).

Claim 32:

A radiating element for generating a electromagnetic millimeter signal and a first lens (42) positioned to collimate at least a part of the millimeter signal into a beam, and a receiver comprising a electromagnetic receiving element and a second lens (48) positioned to focus the beam to the receiving element, the shutter switch positioned between the first and second lenses (SLM 46 – Fig. 2 including shutter switch 93 – Fig. 3).

Claim 48 is rejected under 35 U.S.C. 102(b) as being anticipated by Kanack (U.S. Patent No. 5,526,172), Applicant's prior art submitted in the IDS dated July 23, 2004.

Claim 48:

Kanack shows a method of switching an electromagnetic beam (where the method is defined by the final product; where Kanack shows a final product, inherently formed by a method) comprising: transmitting the beam through one or more waveguides (the transmission of an electromagnetic beam, inherent in the function of the waveguide and all switches shown by Kanack, the waveguide explicitly shown in Fig. 25a or implicitly by all switch figures in which the waveguide would be defined as the transmission lines of the respective switches); and switching the walls of the waveguide between high impedance and conductive states to control the propagation of selected modes of the beam (where Kanack discloses the functionality of the switch to adjust the impedance with respect to Fig. 18, in which the switch blocks or unblocks the optical path of the transmitted signal – col. 20, line 39 to col. 21, line 13; the high impedance formed in the walls by the deflected member).

Allowable Subject Matter

Claims 49 – 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean O Takaoka whose telephone number is (571) 272-1772. The examiner can normally be reached on 8:30a - 5:00p Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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January 4, 2005